THE ECONOMIC CONTRIBUTION OF THE FOREST PRODUCTS INDUSTRY IN MICHIGAN, 2022

- Michigan has over 20.2 million acres of forest land, with timberland accounting for 95 percent of this total.
- Forests in Michigan have long supported local and state economies, generating employment and income.
- Michigan's forest products industries contributed 40,449 direct jobs, $3.2 billion in labor income, $4.5 billion in value added, and $16.2 billion in direct output.
- These direct contributions generate additional indirect and induced effects in the economy.
- The total contributions of forest product industries, including direct, indirect, and induced effects, amounted to $26.5 billion in total output, 88,275 total jobs, $6.4 billion in total labor income, and $9.9 billion in total value added.
- Although the direct employment number decreased by 3.6% in 2022 compared to 2019, all other economic indicators (labor income, value added, output, average wage, and industry productivity) show substantial growth (increasing more than 10%).

For every direct job created in the forest sector, an additional 1.1 jobs are generated.

———

Every dollar spent in forest products industries generates an additional $0.64 in the economy.

———

The average wage in the forest product industry is almost $80,000.

———

Direct industry productivity (output per employee) is about $400,000.

———

The forest products industry contributed a total of $1.5 billion in federal taxes and a total of $488 million in state taxes.

Table 1: Direct economic contribution of six aggregated forest products industries in Michigan, 2022

Aggregated forest product industry	Employment	Labor Income (millions $)	Value Added (millions $)	Output (millions $)
Forestry and logging	5,896	226.89	283.28	470.44
Primary Solid Wood Products	5,698	447.90	939.15	3,494.40
Secondary Solid Wood- Products	6,326	476.48	765.85	2,089.98
Wood Furniture	9,712	788.20	881.07	2,424.43
Pulp, Paper and Paperboard	3,340	386.57	592.11	2,641.09
Secondary Paperboard and- other Paper Products	9,477	879.12	1,101.32	5,099.44
Total	40,449	3,205.15	4,562.77	16,219.78

Table 2: Total economic contribution of six aggregated forest products industries in Michigan, 2022

Aggregated forest product industry	Employment	Labor Income (millions $)	Value Added (millions $)	Output (millions $)
Forestry and logging	7,464	321.17	450.66	772.87
Primary Solid Wood Products	14,331	1,054.32	1,975.49	5,510.12
Secondary Solid Wood Products	12,403	881.06	1,438.59	3,361.03
Wood Furniture	18,757	1,366.24	1,857.46	4,275.13
Pulp, Paper and Paperboard	11,111	938.90	1,523.67	4,446.96
Secondary Paperboard and other Paper Products	24,208	1,855.65	2,740.46	8,216.03
Total	88,275	6,417.33	9,986.33	26,582.14

Notes:

- Economic contribution analysis results are based on multi-industry contribution analysis approach with the method of matrix inversion.
- IMPLAN sectors includes: 10 (partial),15, 16, 19 (partial), 45, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144,145, 146, 147,148, 149, 150, 151, 365, 366, 367, 369 (partial), 370, 371, 373 (partial)
- Output includes the dollar measure of production within an area; it is also viewed as sales.
- Employment includes the number of full-time and part-time jobs associated with an industry.
- Labor income includes the dollar total of employee compensation and proprietor income; the latter is associated with self-employed individuals.
- Value added includes the sum labor income, other property income (e.g., rents and profits) and indirect business taxes (e.g., excise and sales taxes). It is the difference between an industry's total output and the cost of its intermediate inputs. The sum of value added for all economic sectors within the state equals the Gross State Product.
- Direct contribution is the economic activities (e.g., output, employment, labor income, and value added) associated with an industry or sector in the study area. These can describe the current economic sectors or changes to those sectors.
- Total contribution is the sum of direct, indirect, and induced effects.

Author

Jagdish Poudel, PhD
Forest Economist, Forest Resources Division, Michigan Department of Natural Resources
Adjunct Assistant Professor, Department of Forestry, Michigan State University
Email: poudelj@michigan.gov; poudelja@msu.edu
Phone: 517.256.3928
Constitutional Hall, 525 West Allegan, PO Box 30452, Lansing, Michigan, 48909